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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,823

07/10/2006

James Gavin Burnet

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201 7590 08/22/2007  
UNILEVER INTELLECTUAL PROPERTY GROUP  
700 SYLVAN AVENUE,  
BLDG C2 SOUTH  
ENGLEWOOD CLIFFS, NJ 07632-3100

EXAMINER

KRASS, FREDERICK F

ART UNIT

PAPER NUMBER

1614

MAIL DATE

DELIVERY MODE

08/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/551,823	BURNET ET AL.	
	Examiner	Art Unit	
	Frederick Krass	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 4-9 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 4-9 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **Previous Rejections**

Unless specifically repeated/maintained infra, all previous rejections are withdrawn.

### **Obviousness Rejection**

1) Claims 2, 4-9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Document 58-208208 (full English language translation).

The prior art discloses a continuous toothpaste manufacturing process in which a thickener is added under vacuum to a slurry of abrasive, humectant and surfactant. See working examples 1 and 2 at pages 17-20 of the translation. Note the specific disclosure of calcium carbonate at the last line of page 8; note also the use of a calcium silicate, a “thickening silica” as required by instant claim 9, in working example 2.

The prior art differs substantively from the instant claims only insofar as it does not specifically include a fluoride in the abrasive slurry. This is plainly suggested, however, by the teachings that additional oral care agents, e.g., a “medicinal substance” such as a fluoride anticaries agent, may be included at any step during manufacture. See the last full paragraph on page 11; see also the paragraph bridging pages 13 and 14. It would have been obvious, therefore, to have included a fluoride in accordance with those teachings.

Regarding specific process variations recited in certain specific claims, these are viewed as generally obvious in view of well-established precedent. For example, the inclusion of a surfactant or fluoride in the thickening mixture (claims 4 and 5) is viewed as obvious in

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accordance with MPEP 2144.04 [R-1], part IV, section C. (Citing various precedent stating that selection of any order of mixing ingredients is generally obvious, absent a showing of criticality). Similarly, it would be expected to be within the ordinary skill in the art to determine how long to let the thickening mixture sit during hydration, and how long to mix following same (claim 13), in accordance with settled precedent such as In re Aller, 105 USPQ 233, 235 (CCPA 1955); In re Boesch, 205 USPQ 215 (CCPA 1980); and In re Peterson, 65 USPQ2d 1379 (Fed. Cir. 2003). (Collectively holding that it is generally prima facie obvious to determine workable or optimal values within a prior art process through the application of routine experimentation):

2) Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 58-208208 (full translation) in view of Trenner (USP 4,544,006).

The primary reference is discussed supra and differs from the instant claims insofar as it does not specify use of a coaxial injector to introduce the thickener mixture.

The secondary reference teaches that it is known that coaxial injection of liquids and pastes, including toothpastes, is desirable since it minimizes the introduction of air bubbles during mixing (column 2, lines 54 and 55, for instance). The secondary reference is silent regarding the instant continuous manufacturing methods, however.

It would have been obvious to have introduced the thickening mixture by coaxial injection in the manufacturing process disclosed by the primary reference, motivated by the desire to minimize introduction of air bubbles as taught by the secondary reference.

**Action is Final, Necessitated by Amendment**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick Krass whose telephone number is (571) 272-0580. The examiner can normally be reached at (571) 272-0580 on Monday through Friday from 9:30AM to 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached at (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frederick Krass  
Primary Examiner  
Art Unit 1614

